

PIKE INDUSTRIES, INC.)	DEPARTMENTAL
KENNEBEC COUNTY)	FINDINGS OF FACT AND ORDER
FAIRFIELD, MAINE)	AIR EMISSION LICENSE
A-364-71-I-R (SM))	

After review of the air emission license application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Pike Industries, Inc. (Pike) located in Fairfield, Maine has applied to renew their Air Emission License, permitting the operation of their hot mix asphalt plant (**P705**).

B. Emission Equipment

Asphalt Plant (P705):

<u>Equipment</u>	<u>Process Rate</u> <u>(tons/hour)</u>	<u>Design Capacity</u> <u>Firing Rate</u>	<u>Control</u> <u>Devices</u>	<u>Stack</u> <u>ID</u>	<u>Date of</u> <u>Manufacture</u>
(P705)	300	60.0 MMBtu/hr,	baghouse	#1	1983
Rotary Kiln		428 gal/hr, #2 fuel, #4, and/or spec. waste oil			

C. Application Classification

The application for Pike does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be a renewal of current licensed emissions units only. With the current limits on the asphalt plant, the facility is licensed below the major source thresholds and is considered a synthetic minor.

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II. BEST PRACTICAL TREATMENT

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent best practical treatment (BPT), as defined in Chapter 100 of the Bureau of Air Quality regulations. BPT for new units consists of meeting Best Available Control Technology (BACT).

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

A. Asphalt Batch Plant

Pike operates a Portable Hot Mix Asphalt (HMA) Plant designated as **P705**, for the production of asphalt at their Fairfield, Maine facility. The rotary kiln was manufactured in 1983 and is therefore subject to EPA New Source Performance Standards (NSPS) Subpart I for Hot Mix Asphalt Facilities manufactured after June 11, 1973. Source testing conducted June 1979 demonstrated an average emission rate less than 0.03 gr/dscf, in compliance with NSPS. The rotary kiln fires #2 fuel oil with a sulfur content not to exceed 0.5% by weight and/or #4 and specification waste oil with a sulfur content not to exceed 0.7% by weight. Fuel use shall not exceed 250,000 gal/year based on a calendar year basis.

To meet the requirements of Best Practical Treatment (BPT) and NSPS for the control of particulate matter (PM) emissions, the asphalt plant Rotary Drum shall vent to a baghouse. Opacity from the asphalt batch plant baghouse is limited to no greater than 20% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period.

The performance of the baghouse shall be constantly monitored by either one of the following at all times the Rotary Drum is operating:

1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Pike shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.

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2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the hot mix asphalt plant is operating with insufficient control and corrective action shall be taken immediately.

Pike Industries, Inc. may process up to 10,000 cubic yards per year of soil contaminated by gasoline or #2 fuel oil without prior approval from the Department. This limit may be exceeded with written authorization from the Department. The plant owner or operator shall notify the commissioner at least 24 hours prior to processing the contaminated soil and specify the contaminating fuel and quantity, origin of the soil and fuel and the disposition of the contaminated soil.

Pike Industries, Inc. may process up to 5,000 cubic yards per year of soil contaminated with virgin oil as defined by the Bureau of Air Quality without prior approval from the Bureau of Air Quality. Virgin oil processing shall be done at a mixture of no greater than 30% contaminated soil to 70% clean aggregate mix. Processing of virgin oil contaminated soils may require a solid waste processing facility license under MEDEP Chapter 409. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management.

Virgin Oil Definition:

Virgin oil means any petroleum derived oil, including petroleum fuels, unused motor oils, hydraulic fluids, lubrication oils and other industrial oils, that are not characterized as waste oil.

Pike Industries, Inc. shall not process soils which are classified as hazardous waste or which have unknown contaminants.

When processing contaminated soils, Pike Industries, Inc. shall maintain records which specify the quantity and type of contaminant in the soil as well as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Pike Industries, Inc. shall maintain records of processing temperature, asphalt feed rates and dryer throughput on an hourly basis. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management.

Based on the above hot mix asphalt plant process rate, the maximum emission rate from the asphalt baghouse shall be limited to 0.03 grs/dscf (5.7 lb/hr).

A summary of the BPT analysis for the Asphalt Plant is as follows:

1. PM emissions shall not exceed 0.03 gr/dscf. PM10 emission limits are based on PM limits.
2. The sulfur content of the #2 fuel oil shall not exceed 0.5% sulfur by weight and the sulfur content of the #4 fuel oil and specification waste oil shall not exceed 0.7% sulfur by weight. The fuel records shall be maintained on a monthly as well as on a calendar year basis.
3. NO_x, CO, and VOC emission limits are based upon AP-42 dated 3/04.
4. Visible Emissions from the Asphalt Plant baghouse is limited to no greater than 20% opacity on a 6-minute block average, except for no more than two 6-minute block averages in a continuous 3-hour period.

B. Stock Piles and Roadways

Visible emissions from potential sources of fugitive particulate matter emissions, including material stockpiles and unpaved roadways, shall not exceed an opacity of 20 percent, except for no more than 5-minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20 percent in any 1-hour.

C. General Process Emissions

Visible emissions from a general process (including conveyor belts) shall not exceed an opacity of 10% on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1-hour period.

D. Facility Emissions and Fuel Use Caps

Based on the process rate of 300 tons per hour of Hot Mix Asphalt (HMA), and total fuel use of 250,000 gallons/year of #2 fuel, #4, and/or specification waste oil for the HMA plant, the total allowable annual emissions for the facility are as follows:

Total Allowable Annual Ton/Year Emissions for the Facility
(used to calculate the annual license fee)

Pollutant	Tons/year
PM	1.7
PM ₁₀	1.7
SO ₂	12.3
NO _x	10.5
CO	35.0
VOC	1.3

III. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 115, the level of air quality analyses required for a renewal source shall be determined on a case-by-case basis. Based on the information available in the file, Pike Industries, Inc. is below the emissions level required for modeling and monitoring.

ORDER

Based on the above Findings and subject to conditions listed below the Department concludes that the emissions from this source:

will receive Best Practical Treatment,
will not violate applicable emission standards,
will not violate applicable ambient air quality standards in
conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-364-71-I-R and in the following conditions:

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions. [MEDEP Chapter 115]
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 115. [MEDEP Chapter 115]
- (3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [MEDEP Chapter 115]

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- (4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [MEDEP Chapter 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. § 353. [MEDEP Chapter 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [MEDEP Chapter 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [MEDEP Chapter 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [MEDEP Chapter 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [MEDEP Chapter 115]
- (10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [MEDEP Chapter 115]
- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
 - A. perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:
 - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department

that equipment may be operating out of compliance with emission standards or license conditions; or

2. pursuant to any other requirement of this license to perform stack testing.

- B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. submit a written report to the Department within thirty (30) days from date of test completion.

[MEDEP Chapter 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

- A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and
- B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
- C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[MEDEP Chapter 115]

- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [MEDEP Chapter 115]

- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such

occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [MEDEP Chapter 115]

- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [MEDEP Chapter 115]

SPECIFIC CONDITIONS

(16) **Asphalt Plant**

- A. Emissions from the hot mix asphalt plant shall vent to a baghouse, and all components of the asphalt plant shall be maintained so as to prevent PM leaks. [MEDEP Chapter 115, BPT]
- B. The performance of the baghouse shall be constantly monitored by either one of the following at all times the Dryer is operating [MEDEP Chapter 115, BPT]:
 - 1. PM detector – when the detector signals excessive PM concentrations in the exhaust stream, Pike shall take corrective action within 24 hours, or immediately if opacity exceeds 20%.
 - 2. Personnel with a current EPA Method 9 visible emissions certification – when the opacity exceeds 20%, the asphalt plant is operating with insufficient control and corrective action shall be taken immediately.
- C. To document maintenance of the baghouse, the license shall keep a maintenance log recording the date and location of all bag failures as well as all routine maintenance. The maintenance log shall be kept on-site at the asphalt plant location. [MEDEP Chapter 115, BPT]
- D. Opacity from the baghouse is limited to no greater than 20% on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a continuous 3-hour period. [MEDEP Chapter 101]
- E. General process emissions from the asphalt plant shall be controlled so as to prevent visible emissions in excess of 20% opacity on a six (6) minute block average basis except for no more than one (1) six (6) minute block average in a 1-hour period. [MEDEP Chapter 101]
- F. Fuel use records and receipts for the asphalt Dryer shall be maintained for at least six years and made available to the Department upon request. A log shall also be maintained recording the quantity and analyzed test results of all

specification waste oil in the dryer.

[MEDEP Chapter 115, BPT]

- G. Pike shall be limited to the use of 250,000 gal/year of #2 fuel oil, #4 fuel oil, and specification waste oil (calendar year basis), with a sulfur content not to exceed 0.5% for the #2 fuel oil and 0.7% for the #4 and spec oil in the Dryer. The fuel records shall be maintained on a monthly as well as on a calendar year basis.
- H. Emissions from the baghouse shall not exceed the following [MEDEP Chapter 115, BPT]:

<u>Pollutant</u>	<u>grs/dscf</u>	<u>lb/hr</u>
PM	0.03	5.7
PM ₁₀	-	5.7
SO ₂	-	42.3
NO _x	-	36.0
CO	-	120.0
VOC	-	4.5

- I. Pike Industries, Inc. may process up to 10,000 cubic yards per year of soil contaminated by gasoline or #2 fuel oil without prior approval from the Department. This limit may be exceeded with written authorization from the Department. The plant owner or operator shall notify the commissioner at least 24 hours prior to processing the contaminated soil and specify the contaminating fuel and quantity, origin of the soil and fuel and the disposition of the contaminated soil. [MEDEP Chapter 115, BPT]
- J. Pike Industries, Inc. may process up to 5,000 cubic yards per year of soil contaminated with virgin oil as defined by the Bureau of Air Quality without prior approval from the Bureau of Air Quality. Virgin oil processing shall be done at a mixture of no greater than 30% contaminated soil to 70% clean aggregate mix. Processing of virgin oil contaminated soils may require a solid waste processing facility license under MEDEP Chapter 409. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [MEDEP Chapter 115, BPT]
- K. Pike Industries, Inc. shall not process soils which are classified as hazardous waste or which have unknown contaminants. [MEDEP Chapter 115, BPT]
- L. When processing contaminated soils, Pike Industries, Inc. shall maintain records which specify the quantity and type of contaminant in the soil as well

as the origin and characterization of the contaminated soil. In addition, when processing contaminated soil, Pike Industries, Inc. shall maintain records of processing temperature, asphalt feed rates and dryer throughput on an hourly basis. The material shall be handled in accordance with the requirements of the Bureau of Remediation and Waste Management. [MEDEP Chapter 115, BPT]

M. Pike Industries, Inc. shall notify the Bureau of Air Quality regional inspector at least 7 days prior to processing soil contaminated with anything other than #2 fuel oil, gasoline or virgin oil. [MEDEP Chapter 115, BPT]

(17) Fugitive Emissions

Visible emissions from potential sources of fugitive particulate matter emissions, including material stockpiles and unpaved roadways, shall not exceed an opacity of 20 percent, except for no more than 5-minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20 percent in any 1-hour. [MEDEP Chapter 101]

(18) Equipment Relocation [MEDEP Chapter 115, BPT]

A. Pike Industries, Inc. shall notify the Bureau of Air Quality, by a written notification at least 48 hours prior to relocation of any equipment carried on this license. Written notice may be sent by mail, facsimile (fax), or e-mail. Notification sent by mail shall be sent to the address below or to a Department Regional Office:

Attn: Relocation Notice
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Equipment relocation notification can also be done on-line with e-notice at www.maine.gov/dep/air/compliance/forms/relocation.

The notification shall include the address of the equipment's new location, an identification of the equipment and the license number pertaining to the relocated equipment.

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- B. Written notification shall also be made to the municipality where the equipment will be relocated, except in the case of an unorganized territory where notification will be made to the respective county commissioners.
- (19) The Hot mix Asphalt Plant is subject to 40 CFR Part 60 Subparts A and I. Pike shall comply with notification and recordkeeping requirements of 40 CFR Part 60.7.
- (20) Pike Industries, Inc. shall pay the annual air emission license fee within 30 days of March 30th of each year. Pursuant to 38 MRSA 353-A, failure to pay this annual fee in the stated timeframe is sufficient grounds for the revocation of the license under 38 MRSA 341-D, Subsection 3.
- (21) Pike Industries, Inc. shall keep a copy of this Order on site, and have the operator(s) be familiar with the terms of this Order. [MEDEP Chapter 115]

DONE AND DATED IN AUGUSTA, MAINE THIS DAY OF 2005.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAWN R. GALLAGHER, COMMISSIONER

The term of this order shall be for five (5) years from the signature date above.

PLEASE NOTE THE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 24, 2004

Date of application acceptance: March 31, 2004

Date filed with the Board of Environmental Protection _____

This order prepared by Edwin L. Cousins Bureau of Air Quality

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